

100

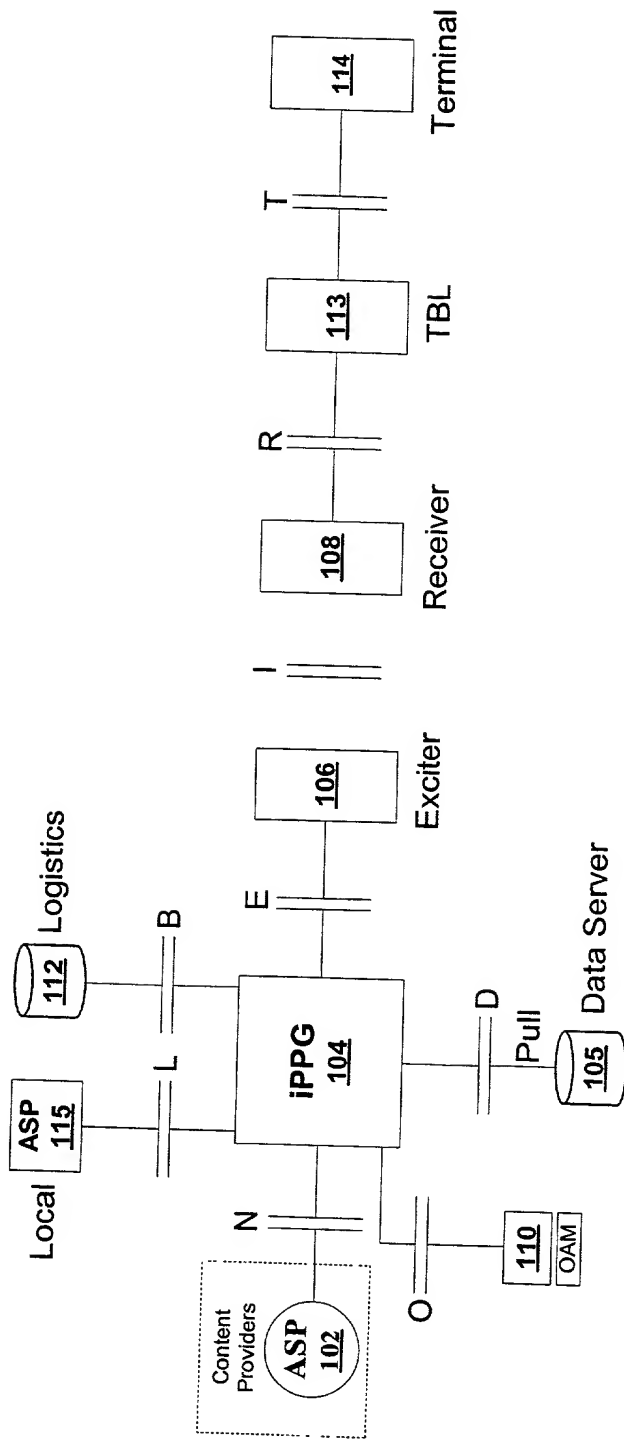


Figure 1

	Entity	Interface Reference	Physical Interface	Network Interface
102	ASP - iPPG	N (Network)	POTS/ISP (Default)	TCP/IP (Default)
106	iPPG - Exciter	E (Exciter)	1) STL (Default) 2) POTS 3) Other loop access wireless, LMDS, Satellite	PPP or SLIP
112	iPPG - Log (CDR)	B (Billing)	Ethernet	Resident at Station or Resident at Remote
105	iPPG - Data Server	D	POTS (Default)	1) PPP - Default 2) TCP/IP
110	iPPG - OAM	O (OAM)	Ethernet	SNMP - MIBx Default
108	Exciter - Receiver	I	iDAB	NA
113	Receiver - TBL	R (Receiver)	Proprietary	NA
114	TBL - Terminal	T (Terminal)	One-on-One	Custom API
115	ASP - Local	L	Off Line: R/W Floppy/CDs On Line: POTS	TCP/IP Default Others: PPP, SLIP etc.

Table 1

Figure 2

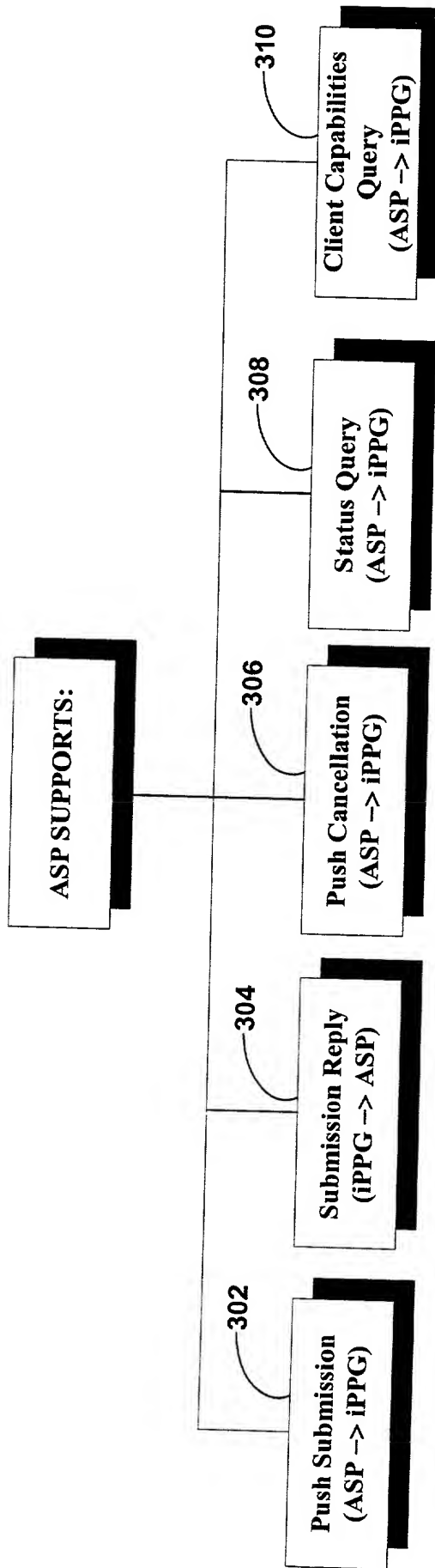


Figure 3

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

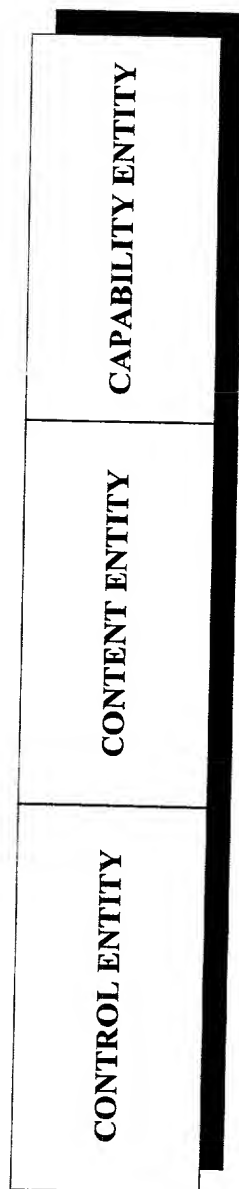


Figure 4

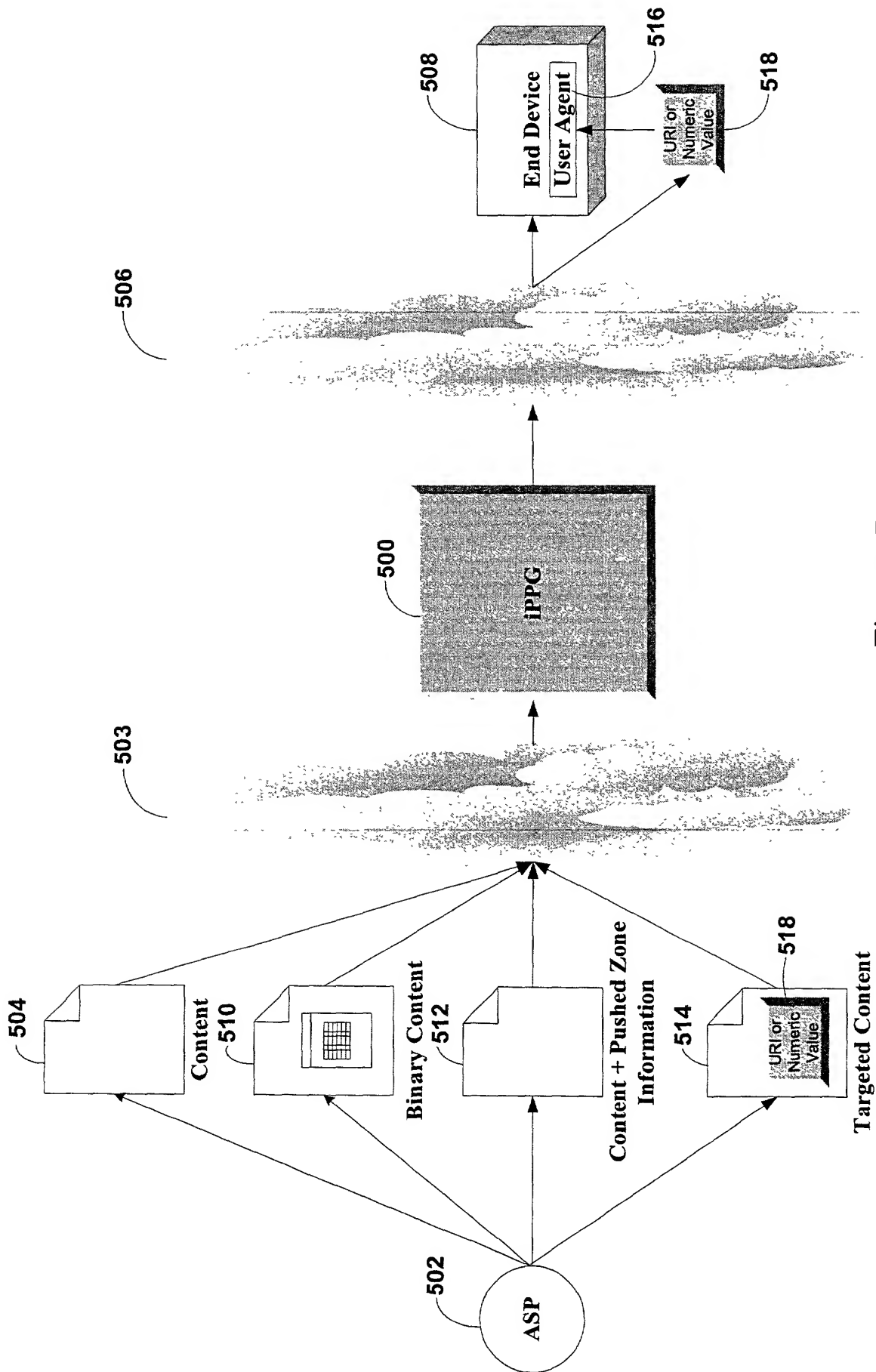


Figure 5

OPERATION ADMINISTRATION
AND MAINTENANCE MODULE

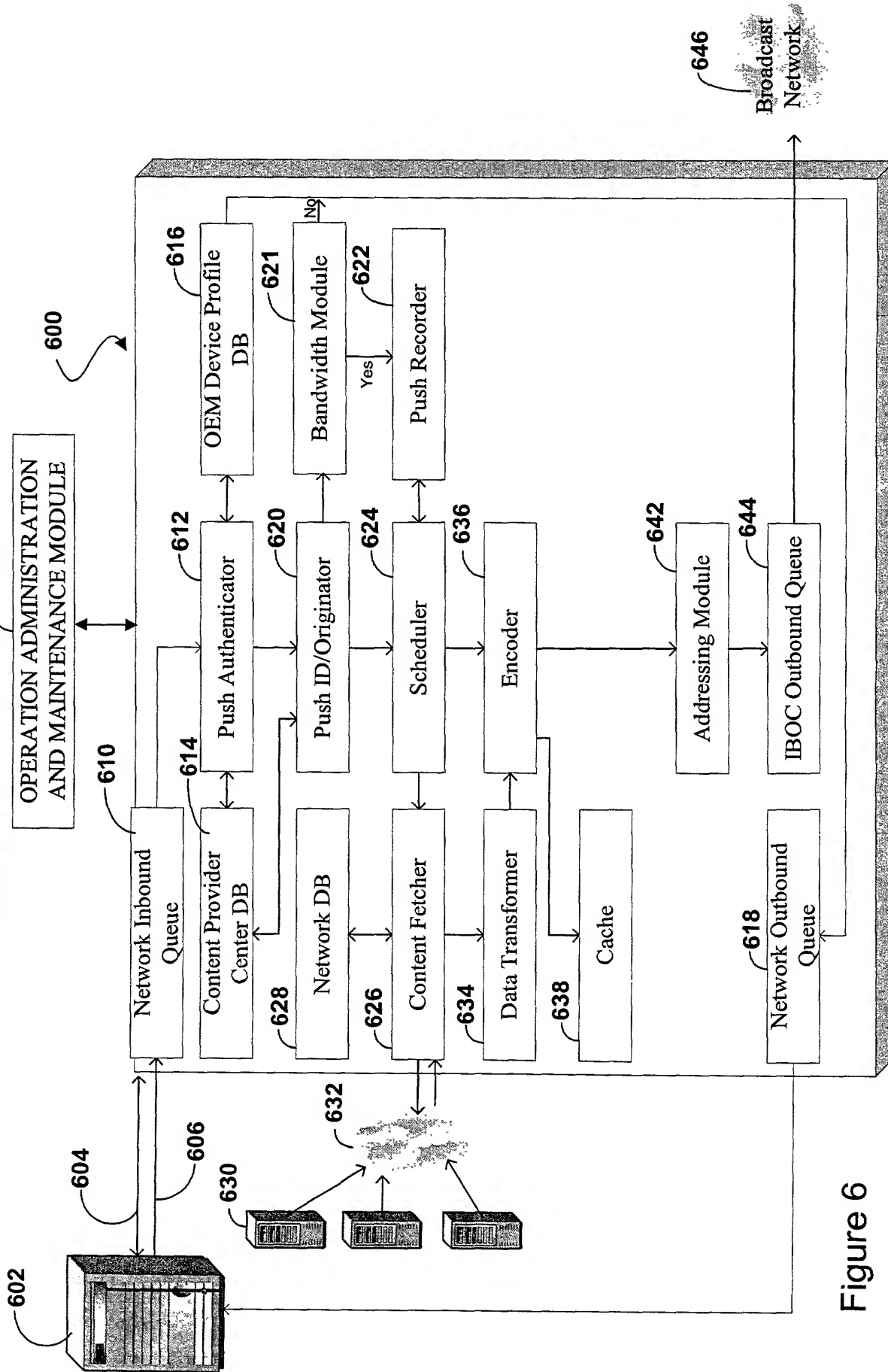


Figure 6

To iBOC enabled
consumer devices

iDAB

709

706

"Push"

702

702

iGateway
700

"Pull"

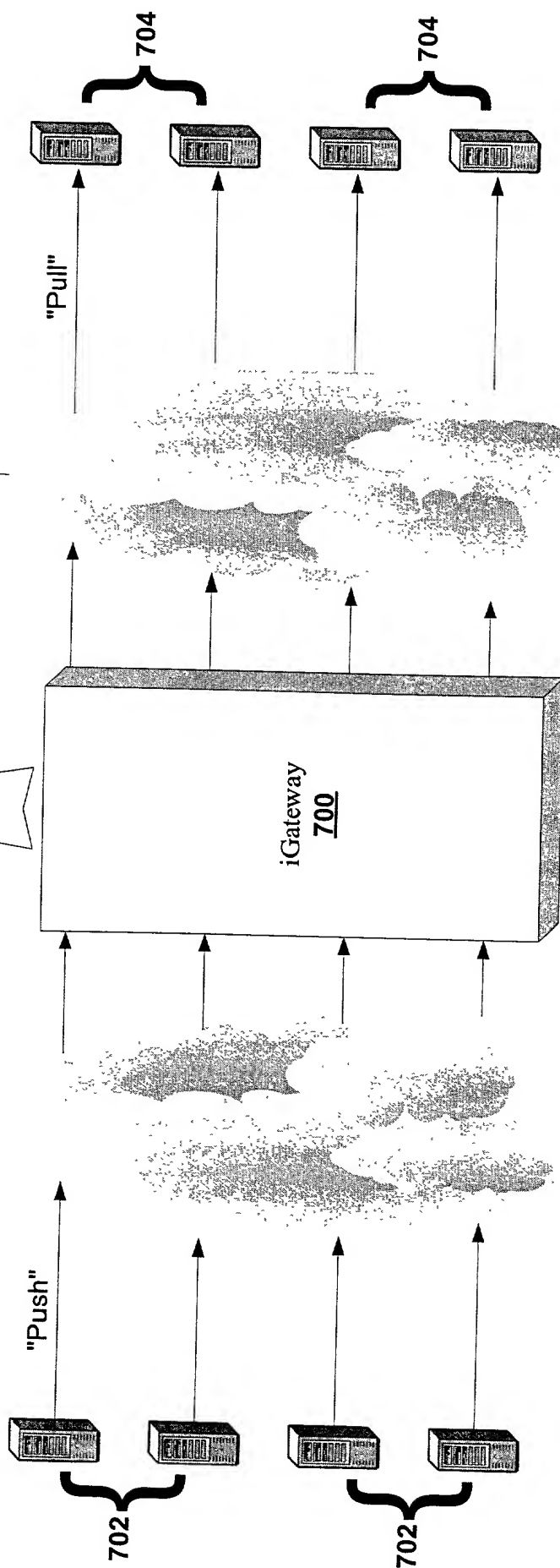
704

704

Pushed

Pulled

Figure 7



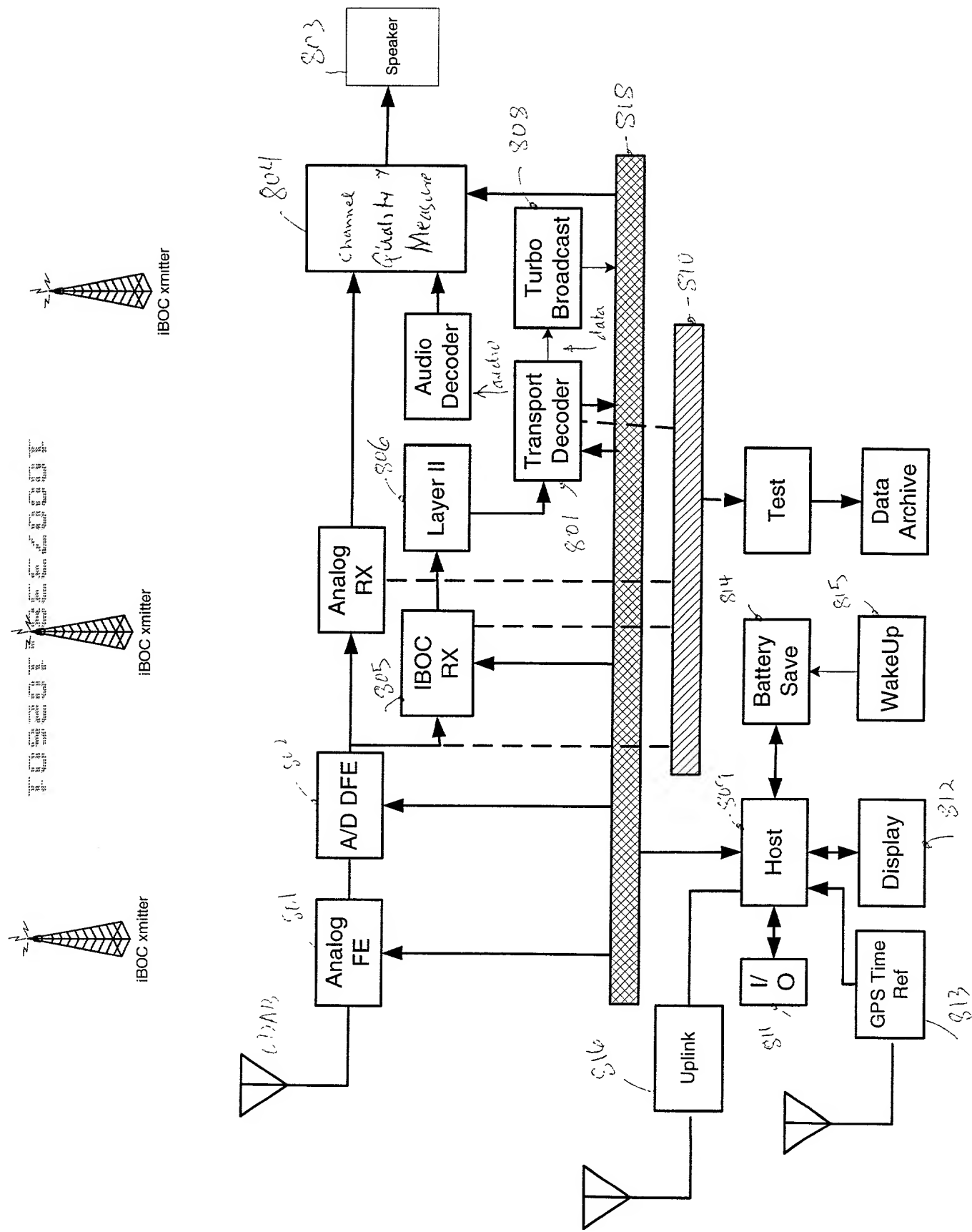


Figure 8

Message Name	ASP	iPPG	Rx	Description
Originating Add	X	X	X	Service Operator Code (SOC) or address
Destination Add	X		X	Broadcast, Multicast or Unicast
Message Ref.	X	X		Random #0-16 bits long
Service Class	X	X		Basic, Preferred, Premium, etc.
Priority Indicator	X	X	X	Normal, Urgent, Emergency
Service Category		X	X	Unknown/unspecified, Administrative, Maintenance, Talent Announcement, Advertisement, News (local, regional, national, international), Sports, Weather, Traffic, Emergency, Alert, Stocks (local, regional, national, international), Entertainment, Restaurants, Lodging, Advertisements, Medical, Health, Hospitals, Multimedia, Audio, Logo, Text, etc.
Alert			X	With Info Vibrate, Tone, Remind, Cadence, etc.
Language ID	X		X	Language filtration
Periodicity	X			Repetition rate
Validity	X	X		Indefinite, Power Down, Display only, etc.
Validity Absolute	X	X		Validity Period (message valid during these times)
Validity Period	X	X		Message valid/not valid during these times
Message Time Stamp		X	X	Optional
Zone	X	X		Cells, Sectors, Entire, etc.
Bearer Data	X	X	X	Any desired Message Contents
Contact #	X		X	For point of sale information. May be a hyperlink.
Security		X	X	
Privacy Indicator		X	X	Unrestricted, Restricted, Confidential, Secret
Feature Private	X		X	
Display Execution		X	X	Pre download with Deactivate On/Off with key/without key
TDB				To be determined

Table 2

Figure 9

Parameter-not-recognized	Sent when the recipient (PPG) was unable to act upon the primitive received due to an unrecognized parameter.
Parameter-value-invalid	Sent when a failure occurred due to the value of a parameter being invalid.
Valid message-not-identified	Sent when the PPG does not recognize the ASP message token number.
RTS-identity-no-valid	Sent when the PPG does not recognize a cell identity.
Unrecognized-message	Sent when the recipient entity did not recognize the protocol message identifier.
Missing-mandatory-element	Sent when a mandatory element is missing from the Primitive.
PPG-capacity-exceeded	Sent when a write-replace fails because the RTS cannot meet the requested repetition rate.
Cell-not-operational	Sent when the PPG/RTS is not available because of error conditions or due to maintenance activities.
Unknown-error cause	Sent when none of the above.
Cell-not-supported	Because of no payment

Table 3

Figure 10

	Error	Delay	E&D	Transmission Rate	Jitter
Data type					
Service Premium					
Time Spent					
Priority					
TOD					

Table 4

Figure 11

Parameter-not-recognized	Sent when the recipient RTS was unable to act upon the primitive received due to an unrecognized parameter.
Parameter-value-invalid	Sent when a failure occurred due to the value of a parameter being invalid.
RTS-capacity-exceeded	Sent when a write-replace fails because the RTS cannot meet the requested repetition rate.
Cell-memory-exceeded	Sent when the local cell memory has been exceeded.
RTS-memory-exceeded	Sent when the PPG is unable to store a message as the BSS memory has been exceeded.
Cell-not-operational	Sent when the RTS is not available because of error conditions or due to maintenance activities.
Unknown-error cause	Sent when none of the above.

Table 5

Figure 12

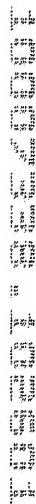


Figure 13a

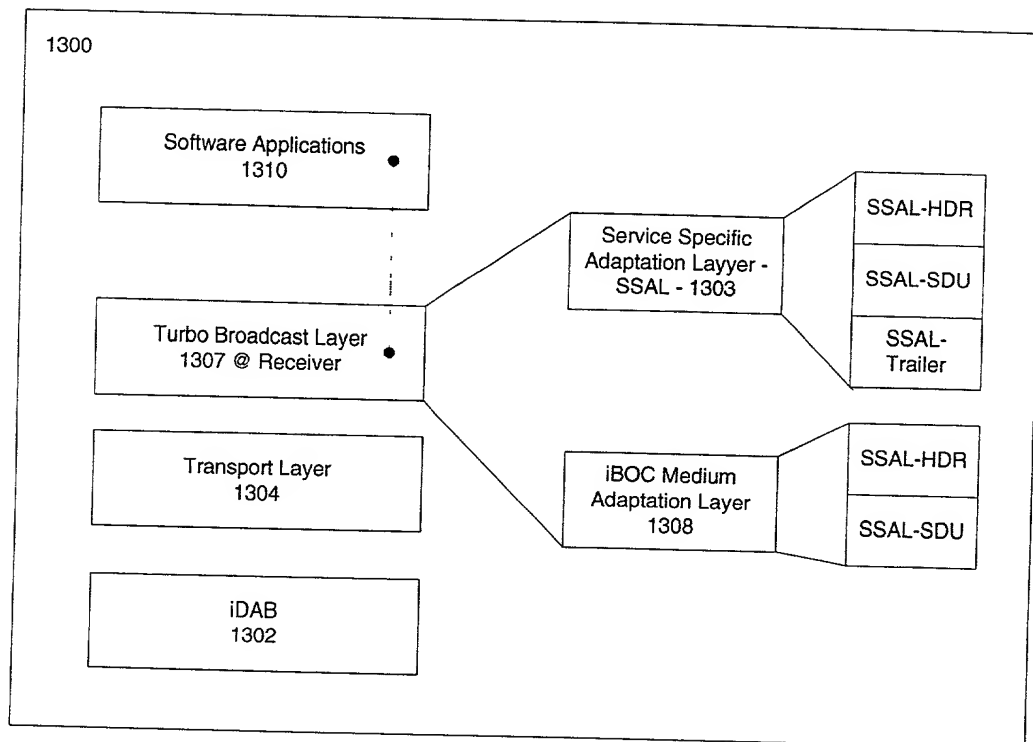


Figure 13 b

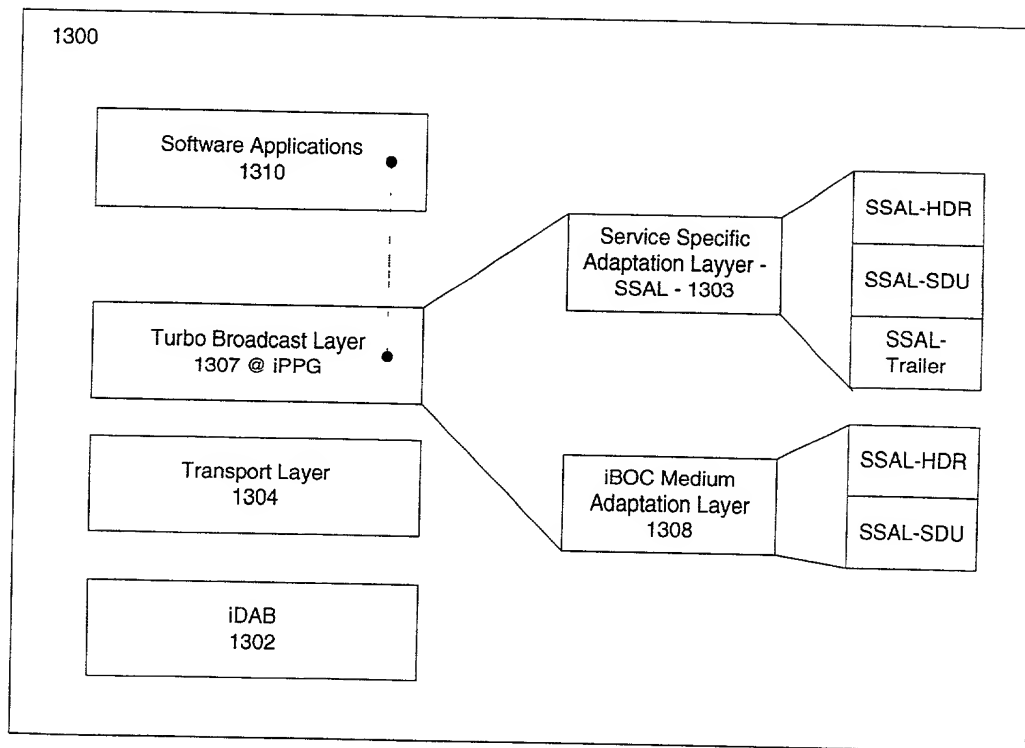


Figure 13 C

FIGURE 14b

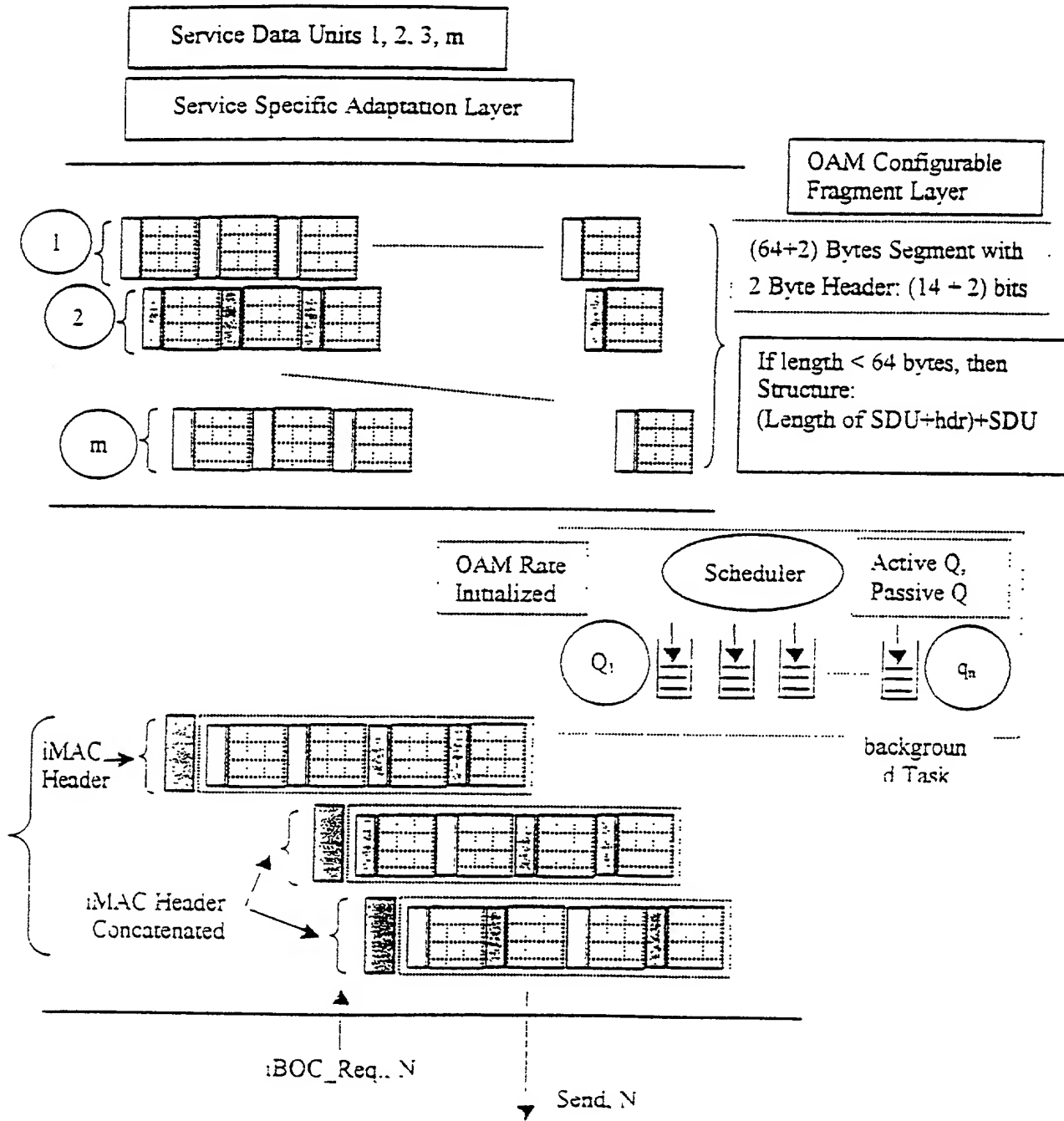
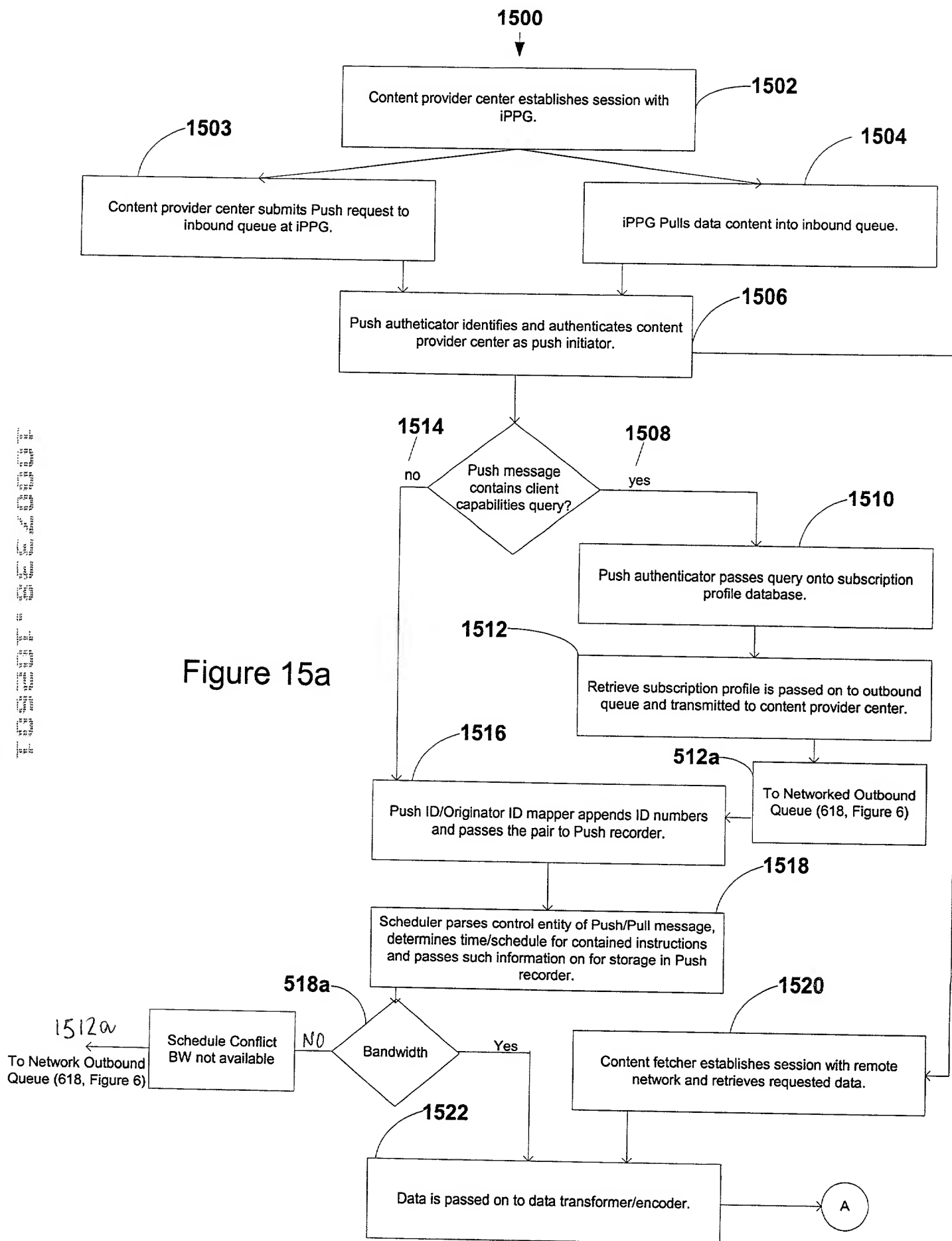


Figure 14b



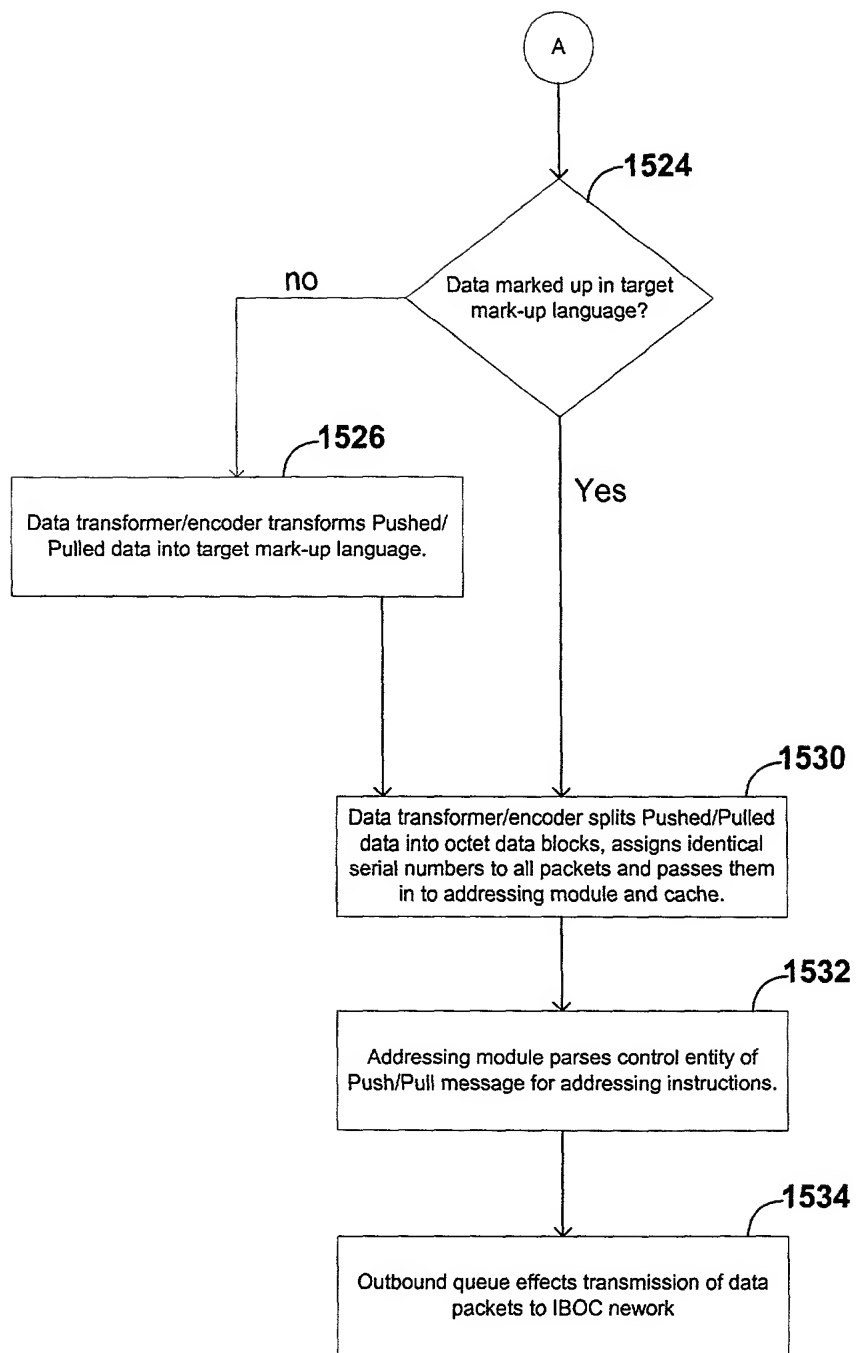


Figure 15b